

01263.001750

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:)	Examiner: Martin Lerner
	:	
JEBU JACOB RAJAN)	Group Art Unit: 2654
	:	
Appln. No.: 09/866,854)	U.S. Patent No.: 7,010,483 B2
	:	
Filed: May 30, 2001)	Issued: March 7, 2006
	:	
For: SPEECH PROCESSING SYSTEM)	December 20, 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF CORRECTION
UNDER RULES 322 AND 323

Sir:

It is respectfully requested that a Certificate of Correction be issued by the Patent and Trademark Office due to errors which appear in the printed patent as a result of Patent and Trademark Office mistakes, and mistakes of a clerical, typographical, or minor character, which were not the fault of the Patent and Trademark Office. A Certificate of Correction form, in duplicate, is enclosed.

Accompanying this letter is a check for \$100.00 to cover the statutory fee for such Certificate of Correction.

Patentee's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

/Jack S. Cubert/
Jack S. Cubert
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CERTIFICATE OF CORRECTION

PATENT NO. : 7,010,483 B2
DATED : March 7, 2006
INVENTOR(S) : JEBU JACOB RAJAN

Page 1 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON COVER PAGE AT (56) OTHER PUBLICATIONS

After "Quatieri et al.," "Proceed-" should read --Proceed--; and
Page 2, After, "Query expansion": "Appliations" should read --Applications--.

ON COVER PAGE AT (56) U.S. PATENT DOCUMENTS

Page 2, "Vähätaalo" should read --Vähätaalo et al.--; and
Page 2, After "Bayesian Separation": "Autoregssive" should read --Autoregressive--.

COLUMN 1

Line 14, "example," should read --for example,--.

COLUMN 4

Line 8, "with out of" should read --without--.

COLUMN 5

Line 51, "step sill" should read --step s111--; and
Line 56, "step sill" should read --step s111--.

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Page 2 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 7

Line 58, " $s(n) = a_1s(n-1) + a_2s(n-2) + \dots + a_k s(n-k) + e(n)$

$$s(n-1) = a_1s(n-2) + a_2s(n-3) + \dots + a_k s(n-k-1) + e(n-1)$$

$$s(n-N+1) = a_1s(n-N) + a_2s(n-N-1) + \dots + a_k s(n-k-N+1) + e(n-N+1)$$

(3)" should read

-- " $s(n) = a_1s(n-1) + a_2s(n-2) + \dots + a_k s(n-k) + e(n)$

$$s(n-1) = a_1s(n-2) + a_2s(n-3) + \dots + a_k s(n-k-1) + e(n-1)$$

$$s(n-N+1) = a_1s(n-N) + a_2s(n-N-1) + \dots + a_k s(n-k-N+1) + e(n-N+1)$$

(3) --.

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Page 3 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 8

Lines 29-34, " $e(n) = s(n) - a_1s(n-1) - a_2s(n-2) - \dots - a_k s(n-k)$

$$e(n-1) = s(n-1) - a_1s(n-2) - a_2s(n-3) - \dots - a_k s(n-k-1)$$

$$e(n-N+1) = s(n-N+1) = a_1s(n-N) - a_2s(n-N-1) - \dots - a_k s(n-k-N+1)$$

(5)"

should read

$$--e(n) = s(n) - a_1s(n-1) - a_2s(n-2) - \dots - a_k s(n-k)$$

$$e(n-1) = s(n-1) - a_1s(n-2) - a_2s(n-3) - \dots - a_k s(n-k-1)$$

..

(5)--; and

$$e(n-N+1) = s(n-N+1) = a_1s(n-N) - a_2s(n-N-1) - \dots - a_k s(n-k-N+1)$$

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Lines 57-62, " $g(n) = h_1s(n-1) + h_2s(n-2) + \dots + h_rs(n-r) + \epsilon(n)$

$$g(n-1) = h_1s(n-2) + h_2s(n-3) + \dots + h_rs(n-r-1) + \epsilon(n-1)$$

$$q(n-N+1) = h_1s(n-N) + h_2s(n-N-1) + \dots + h_rs(n-r-N+1) + \epsilon(n-N+1)$$

(7)"

should read

$$-- g(n) = h_1s(n-1) + h_2s(n-2) + \dots + h_rs(n-r) + \epsilon(n)$$

$$g(n-1) = h_1s(n-2) + h_2s(n-3) + \dots + h_rs(n-r-1) + \epsilon(n-1)$$

$$q(n-N+1) = h_1s(n-N) + h_2s(n-N-1) + \dots + h_rs(n-r-N+1) + \epsilon(n-N+1)$$

(7) --.

COLUMN 9

Lines. 47-49, " $\frac{p(y(n)|s(n), h, r, \sigma_e^2)p(s(n)|a, k, \sigma_e^2)p(a|k)p(h|r)p(\sigma_e^2)p(\sigma_e^2)p(k)p(r)}{p(y(n))}$ " should read

$$-- \frac{p(y(n)|s(n), h, r, \sigma_e^2)p(s(n)|a, k, \sigma_e^2)p(a|k)p(h|r)p(\sigma_e^2)p(\sigma_e^2)p(k)p(r)}{p(y(n))} --.$$

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 10

Line 5, “ $p(\underline{s}(n)|\underline{a}, k, \sigma_e^2) = p(\underline{e}(n)) \left| \frac{\delta \underline{e}(n)}{\delta \underline{s}(n)} \right|_{\underline{e}(n) = \underline{s}(n) - S\underline{a}}$ (11) ” should read

-- $p(\underline{s}(n)|\underline{a}, k, \sigma_e^2) = p(\underline{e}(n)) \left| \frac{\delta \underline{e}(n)}{\delta \underline{s}(n)} \right|_{\underline{e}(n)} = \underline{s}(n) - S\underline{a}$ (11)--; and

Line 55, “ $p(\underline{y}(n)|\underline{s}(n), \underline{h}, r, \sigma_e^2) = p(\underline{\varepsilon}(n)) \left| \frac{\delta \underline{\varepsilon}(n)}{\delta \underline{y}(n)} \right|_{\underline{\varepsilon}(n) = \underline{q}(n) - Y\underline{h}}$ (14) ” should read

-- $p(\underline{y}(n)|\underline{s}(n), \underline{h}, r, \sigma_e^2) = p(\underline{\varepsilon}(n)) \left| \frac{\delta \underline{\varepsilon}(n)}{\delta \underline{y}(n)} \right|_{\underline{\varepsilon}(n)} = \underline{q}(n) - Y\underline{h}$ (14)--.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 13

Lines 38-44, “ $p(a, k|h^0, r^0, \sigma_e^{2^0}, \sigma_\epsilon^{2^0}, \sigma_h^{2^1},)(\underline{s}(n))^0, \underline{y}(n)) \rightarrow \underline{a}^1, k^1$ ”

$p(h, r|\underline{a}^1, k^1, \sigma_e^{2^0}, \sigma_\epsilon^{2^0}, \sigma_a^{2^0}, \sigma_h^{2^0}, \underline{s}(n)^0, \underline{y}(n)) \rightarrow \underline{h}^1, k^1$

$p(\sigma_e^{2^1}|\underline{\alpha}^1, k^1, h^1, r^1, \sigma_\epsilon^{2^0}, \sigma_a^{2^0}, \sigma_h^{2^1}, \underline{s}(n)^0, \underline{y}(n)) \rightarrow \underline{\sigma}_e^{2^1}$

⋮

$p(\sigma_h^{2^1}|\underline{\alpha}^1, k^1, h^1, r^1, \sigma_\epsilon^{2^1}, \sigma_a^{2^1}, \sigma_h^{2^1}, \underline{s}(n))^0, \underline{y}(n)) \rightarrow \underline{\sigma}_h^{2^1}$

should read

-- $p(a, k|h^0, r^0, \sigma_e^{2^0}, \sigma_\epsilon^{2^0}, \sigma_a^{2^0}, \sigma_h^{2^0},)(\underline{s}(n))^0, \underline{y}(n)) \rightarrow \underline{a}^1, k^1$ --

$p(h, r|\underline{a}^1, k^1, \sigma_e^{2^0}, \sigma_\epsilon^{2^0}, \sigma_a^{2^0}, \sigma_h^{2^0}, \underline{s}(n)^0, \underline{y}(n)) \rightarrow \underline{h}^1, k^1$

$p(\sigma_e^{2^1}|\underline{\alpha}^1, k^1, h^1, r^1, \sigma_\epsilon^{2^0}, \sigma_a^{2^0}, \sigma_h^{2^1}, \underline{s}(n)^0, \underline{y}(n)) \rightarrow \underline{\sigma}_e^{2^1}$

⋮

$p(\sigma_h^{2^1}|\underline{\alpha}^1, k^1, h^1, r^1, \sigma_\epsilon^{2^1}, \sigma_a^{2^1}, \sigma_h^{2^1}, \underline{s}(n))^0, \underline{y}(n)) \rightarrow \underline{\sigma}_h^{2^1}$

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COLUMN 17

Line 20, " a vector." should read -- \underline{a} vector.--.

COLUMN 18

Line 4, " $\hat{S}(n) = \bar{A} \cdot \hat{S}(n-1) + \hat{e}(n)$ " should read -- $\hat{S}(n) = \bar{A} \cdot \hat{S}(n-1) + \hat{e}(n)$ --.

COLUMN 19

Line 37, " $\tilde{e}(t) = \sigma_e^2 r(t) + \theta(t)$ where

$\tilde{e}(t) = [\tilde{e}(t)\tilde{e}(t-1)\tilde{e}(t-2)\dots\tilde{e}(t-r+1)]^T$ " should read

-- $\tilde{e}(t) = \sigma_e^2 r(t) + \underline{\eta}(t)$ where

$\tilde{e}(t) = [\tilde{e}(t)\tilde{e}(t-1)\tilde{e}(t-2)\dots\tilde{e}(t-r+1)]^T$ --.

COLUMN 20

Line 14, "above described" should read --above-described--;

Line 44, "above" should read --above---; and

Line 53, "above described" should read --above-described--.

COLUMN 22

Line 25, "value which was" should read --values which were--.

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COLUMN 29

Line 20, "comprising" should read --comprising: ¶--.

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